



Interconnect Multi-site Yeastar S-Series IPPBXs

Version 1.1

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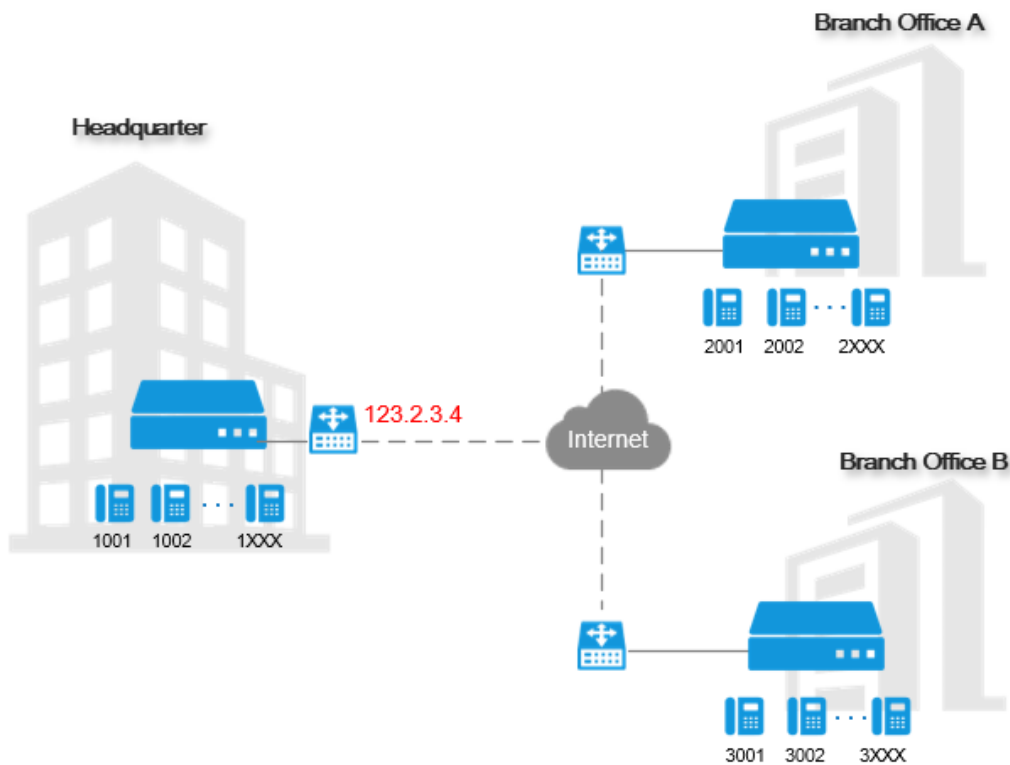
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Introduction

The version (30.6 or later) of Yeastar S-Series IPPBX supports **Multisite Interconnect**. After connecting different branch PBXs to the headquarter PBX, you can achieve:

- Making internal calls between each branch and the headquarter.
- Making internal calls between each two branches.

This article describes how to interconnect 3 Yeastar S-Series IPPBXs which are located in different places. You can connect more Yeastar S-Series IPPBXs in the same way.



Prerequisites

- All the versions of Yeastar S-Series IPPBXs should be 30.6 or later.

Main Steps to Interconnect Yeastar S-Series IPPBXs

1. [Plan and Assign Extensions](#)
2. [Forward Ports for Headquarter PBX](#)
3. [Set up the Headquarter PBX](#)
4. [Connect BranchA PBX and Headquarter PBX](#)
5. [Connect BranchB PBX and Headquarter PBX](#)

Plan and Assign Extensions

Before you start to connect the Yeastar S-Series IPPBXs, you need to plan and assign extensions for the headquarter and the branch offices.

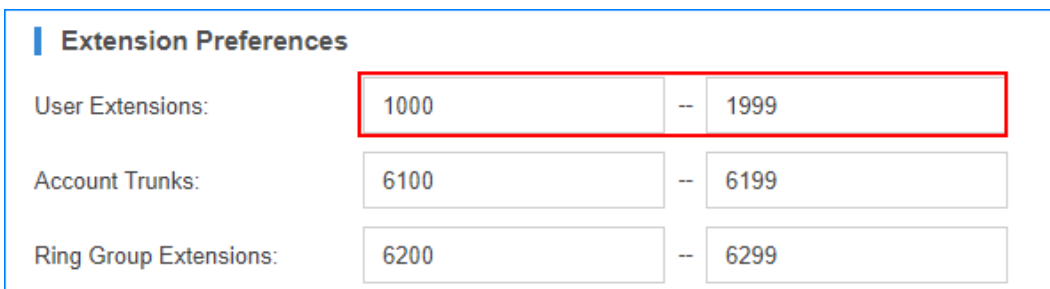
For example, you can assign extensions as the following:

- **Headquarter PBX:** 1XXX (extension number starts with 1)
- **BranchA PBX:** 2XXX (extension number starts with 2)
- **BranchB PBX:** 3XXX (extension number starts with 3)

Procedure

Plan and assign the extensions on the headquarter PBX and the branch PBXs.

1. Log in the web user interface of IPPBX, go **Settings > PBX > General > Preferences**.
2. Change the **User Extensions** to the desired range.



Extension Preferences			
User Extensions:	1000	--	1999
Account Trunks:	6100	--	6199
Ring Group Extensions:	6200	--	6299

3. Click **Save** and **Apply**.
4. Go to **Settings > PBX > Extensions**, create extensions for the users.

Forward Ports for Headquarter PBX

If the headquarter PBX is behind a router, you need to forward ports for the headquarter PBX.

Note: You don't need to forward ports for the branch PBXs.

1. Log in the router that is connected to the headquarter PBX.
2. Forward ports for the PBX. Below are the default ports you need to forward:
 - **SIP Registration Port:** UDP 5060
 - **RTP Ports:** UDP 10000-12000

Set up the Headquarter PBX


Set the role of the headquarter PBX as **Headquarter**, and create interconnections for the branch PBXs.

1. Log in the web user interface of IPPBX, go to **Settings > Multisite Interconnect**.
2. Set the PBX as a Headquarter system.
 - a) Click **Headquarter** to set the role of the PBX as headquarter.

Multisite Interconnect

Select the role this system plays in the whole Multisite Interconnect network:

Headquarter Branch Office

- b) Click  to edit the Headquarter according to the extensions length and extension format of this IPPBX.

Edit Headquarter

Extension Length ⓘ: 4

Extension Format ⓘ: 1 X X X

Save Cancel

- c) Click **Save** and **Apply**.

3. Create an interconnection for branch office A.

- a) Click **Add** to create an interconnection.
- b) Set the name, branch ID and password.

You need to use the branch ID and password to connect the branch office A and the headquarter later.

- c) Set the extension length and the extension format of the branch office A.
- d) (Optional) Enable IP restriction and enter the permitted IP and subnet mask. Only the permitted IP address can connect to the system with this branch ID.

Add Branch Office

Name ⓘ: Branch_Office_A

Branch ID ⓘ: 6800 Password ⓘ:

Extension Number Matching

Extension Length ⓘ: 4 Extension Format ⓘ: 2 X X X

IP Restriction

Enable IP Restriction ⓘ

Permitted IP/Subnet mask: / +

- e) Click **Save** and **Apply**.

4. Create an interconnection for branch office B.

- a) Click **Add** to create an interconnection.

- b) Set the name, branch ID and password.

You need to use the branch ID and password to connect the branch office B and the headquarter later.

- c) Set the extension length and the extension format of the branch office B.

- d) (Optional) Enable IP restriction and enter the permitted IP and subnet mask. Only the permitted IP address can connect to the system with this branch ID.

The screenshot shows a configuration window titled "Add Branch Office". It includes the following fields and options:

- Name:** Branch_Office_B
- Branch ID:** 6800
- Password:** Masked with asterisks
- Extension Number Matching:**
 - Extension Length:** 4
 - Extension Format:** 3 X X X
- IP Restriction:**
 - Enable IP Restriction
 - Permitted IP/Subnet mask:** Two empty input fields separated by a slash, with a plus icon to the right.

- e) Click **Save** and **Apply**.

Connect BranchA PBX and Headquarter PBX

Set the role of the BranchA PBX as **Branch**, and connect to the headquarter PBX. Users can make internal calls between the branch office A and the headquarter.

1. Log in the web user interface of IPPBX, go to **Settings > Multisite Interconnect**.
2. Click **Branch Office** to set the system as a branch system.

The screenshot shows the "Multisite Interconnect" configuration page. It displays the text "Select the role this system plays in the whole Multisite Interconnect network:" followed by two options: "Headquarter" and "Branch Office". The "Branch Office" option is highlighted with a red rectangular box.

3. Create an interconnection to the headquarter PBX.
 - a) Click **Add** to add an interconnection.
 - b) Enter the IP/domain and SIP port of the headquarter PBX.
 - c) Enter the branch ID and password that were set on the headquarter PBX for branch office A.

4. Click **Save** and **Apply**.

If the interconnection status shows , the branch PBX is connected to the headquarter PBX.

Connect BranchB PBX and Headquarter PBX

Set the role of the BranchB PBX as **Branch**, and connect to the headquarter PBX. Users can make internal calls between the branch office B and the headquarter.

As branch A and branch B are both connected to the headquarter system. Users can make internal calls between the branch office A and the branch office B.

1. Log in the web user interface of IPPBX, go to **Settings > Multisite Interconnect**.
2. Click **Branch Office** to set the system as a branch system.

3. Create an interconnection to the headquarter PBX.
 - a) Click **Add** to add an interconnection.
 - b) Enter the IP/domain and SIP port of the headquarter PBX.
 - c) Enter the branch ID and password that were set on the headquarter PBX for branch office A.


Add Headquarter ✕

Hostname/IP ⓘ: :

Branch ID ⓘ:

Password ⓘ:

4. Click **Save** and **Apply**.

If the interconnection status shows , the branch PBX is connected to the headquarter PBX.